

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please amend the claims as shown.

1. (Currently Amended) A process for the continuous preparation of concentrated hydrogen peroxide of concentration c_p from aqueous hydrogen peroxide of concentration c_E , c_E being at least 80 weight percent and c_p being greater than c_E , comprising:

suspension crystallizing aqueous hydrogen peroxide of concentration c_E to obtain hydrogen peroxide crystals in a suspension and after-treating of the hydrogen peroxide crystals contained in the suspension,

wherein the after-treating takes the form of countercurrent washing in a hydraulic or mechanical washing column with a packed crystal bed, and washing said ~~hydrogen~~ hydrogen peroxide crystals with molten hydrogen peroxide of concentration c_p as the washing medium.

2. (Original) The process according to claim 1, further comprising concentrating aqueous hydrogen peroxide of concentration c_E in the range from 85 to 95 weight percent, in one step to a concentration c_p of over 98 wt.%.

3. (Original) The process according to claim 1, further comprising concentrating aqueous hydrogen peroxide of concentration c_E in the range from 88 to 92 wt.%, in one step to a concentration c_p of equal to or greater than 99.9 wt.%.

4. (Original) The process according to claim 1, wherein the suspension crystallizing is carried out in a single- or multi-stage scraper-type crystallizer.

5. (Original) The process according to claim 2, wherein the suspension crystallizing is carried out in a single- or multi- stage scraper-type crystallizer.

6. (Original) The process according to claim 3, wherein the suspension crystallizing is carried out in a single- or multi-stage scraper-type crystallizer.

7. (Original) The process according to claim 1, further comprising wherein the suspension crystallizing is carried out in a scraper-type crystallizer, the countercurrent washing of the crystals, combined with solid-liquid separation of the suspension, is carried out in a mechanical washing column, and a portion of the mother liquor that leaves the washing column is fed back into the scraper-type crystallizer.

8. (Original) The process according to claim 2, further comprising wherein the suspension crystallizing is carried out in a scraper-type crystallizer, the countercurrent washing of the crystals, combined with solid-liquid separation of the suspension, is carried out in a mechanical washing column, and a portion of the mother liquor that leaves the washing column is fed back into the scraper-type crystallizer.

9. (Original) The process according to claim 3, further comprising wherein the suspension crystallizing is carried out in a scraper-type crystallizer, the countercurrent washing of the crystals, combined with solid-liquid separation of the suspension, is carried out in a

mechanical washing column, and a portion of the mother liquor that leaves the washing column is fed back into the scraper-type crystallizer.

10. (Original) The process according to claim 4, further comprising wherein the suspension crystallizing is carried out in a scraper-type crystallizer, the countercurrent washing of the crystals, combined with solid-liquid separation of the suspension, is carried out in a mechanical washing column, and a portion of the mother liquor that leaves the washing column is fed back into the scraper-type crystallizer.

11. (Original) The process according to claim 5, further comprising wherein the suspension crystallizing is carried out in a scraper-type crystallizer, the countercurrent washing of the crystals, combined with solid-liquid separation of the suspension, is carried out in a mechanical washing column, and a portion of the mother liquor that leaves the washing column is fed back into the scraper-type crystallizer.

12. (Original) The process according to claim 4, further comprising nucleation in the suspension crystallizing is carried out at a temperature in the range from greater than 0 to 5 K, below the equilibrium temperature of the H₂O₂ starting material, and the temperature is then lowered further until a suspension density in the range from 5 to 80 % is achieved.

13. (Original) The process according to claim 4, further comprising nucleation in the suspension crystallizing is carried out at a temperature in the range from greater than 0.5 to 3 K, below the equilibrium temperature of the H₂O₂ starting material, and the temperature is then lowered further until a suspension density in the range from 5 to 80 % is achieved.

14. (Original) The process according to claim 7, further comprising nucleation in the suspension crystallizing is carried out at a temperature in the range from greater than 0 to 5 K, below the equilibrium temperature of the H₂O₂ starting material, and the temperature is then lowered further until a suspension density in the range from 5 to 80 % is achieved.

15. (Original) The process according to claim 1, wherein the suspension crystallization is carried out to a suspension density in the range from 20 to 50 %.

16. (Original) The process according to claim 1, wherein the suspension crystallization is carried out to a suspension density in the range from 20 to 30 %.

17. (Original) The process according to claim 1, further comprising hydrogen peroxide having a concentration c_p of at least 98 wt.%, that leaves the washing column in the form of a melt is stabilized with an effective amount of one or more stabilizers.

18. (Original) The process according to claim 1, further comprising hydrogen peroxide having a concentration c_p of at least 99 wt.%, that leaves the washing column in the form of a melt is stabilized with an effective amount of one or more stabilizers.

19. (Currently Amended) The process according to claim 1, further comprising hydrogen peroxide having a concentration c_p of at least 99 wt.%, that leaves the washing column in the form of a melt is ~~stabilizing~~ stabilized with a stabilizer from the group of tin compounds, phosphates, di- and tri-phosphates, phosphonates and radical acceptors.

20.-21. (Deleted)

22. (New) A process for the continuous preparation of concentrated hydrogen peroxide of concentration c_p from aqueous hydrogen peroxide of concentration c_E , as the H_2O_2 starting material, c_E being at least 80 wt.% and c_p being greater than c_E , comprising:

suspension crystallizing aqueous hydrogen peroxide of concentration c_E by nucleating at a temperature in the range from greater than 0 to 5 K, below equilibrium temperature of the H_2O_2 starting material, and lowering the temperature further until a suspension density in the range from 5 to 80% is achieved, to obtain hydrogen peroxide crystals in a suspension and after-treating said hydrogen peroxide crystals contained in the suspension, by countercurrent washing said hydrogen peroxide crystals in a hydraulic or mechanical washing column with a packed crystal bed, with molten hydrogen peroxide of concentration c_p as the washing medium.